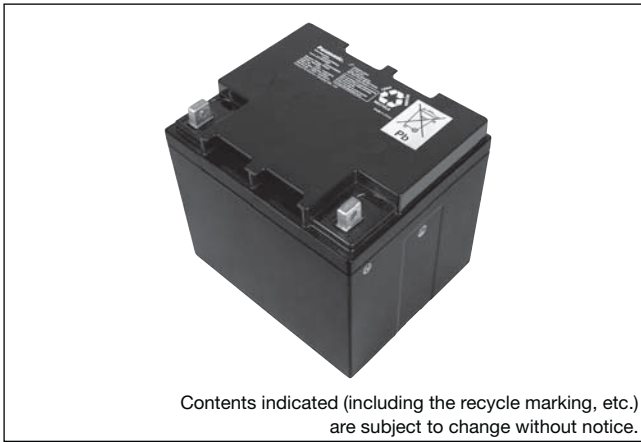
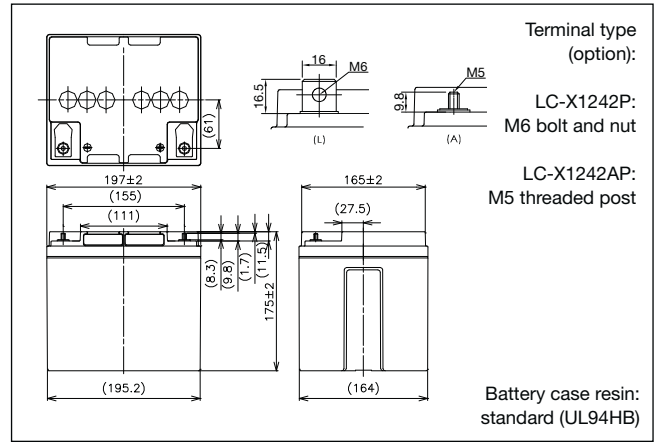


LC-X1242P/AP*1

For standby power supplies.
Expected trickle design life: 10 – 12 years at 20°C according to Eurobat.



Dimensions (mm)



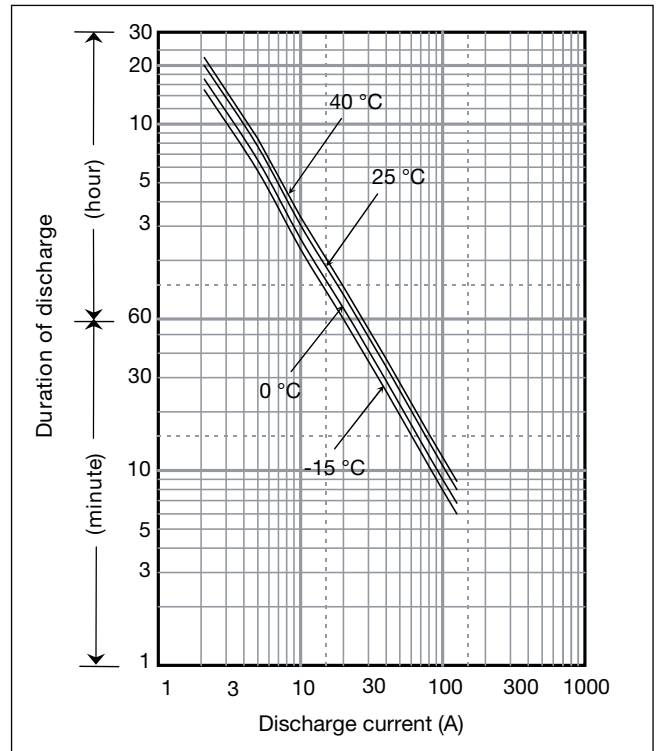
Specifications

| | | |
|---------------------------------|---|---------------------------------------|
| Nominal voltage | 12V | |
| Nominal capacity (20 hour rate) | 42Ah | |
| Dimensions | Length | 197mm |
| | Width | 165mm |
| | Height | 175mm |
| | Total Height | LC-X1242P: 180mm LC-X1242AP: 175mm |
| Approx. mass | 16kg | |
| Terminal | M6 Bolt and Nut type/ M5 threaded post | |

Characteristics

| | | |
|-----------------------|---|------|
| Capacity (25°C) | 20 hour rate | 42Ah |
| | 10 hour rate | 40Ah |
| Internal resistance | Fully charged battery (25°C) | 8mΩ |
| | Temperature dependency of capacity (20 hour rate) | |
| Self discharge (25°C) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self discharge (25°C) | After 3 months | 91% |
| | After 6 months | 82% |
| | After 12 months | 64% |

Duration of discharge vs Discharge current



Watt Table

(Wattage/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 10h | 20h | 24h |
|-----------|------|------|-------|-------|-------|-------|-------|-----|------|-----|-----|-----|------|------|------|------|------|
| 9.6V | 1846 | 1483 | 1254 | 966 | 835 | 625 | 410 | 312 | 241 | 187 | 132 | 110 | 89.9 | 79.1 | 48.0 | 25.2 | 21.0 |
| 9.9V | 1701 | 1405 | 1232 | 966 | 824 | 607 | 407 | 310 | 234 | 186 | 130 | 109 | 88.7 | 79.1 | 48.0 | 25.2 | 21.0 |
| 10.2V | 1612 | 1327 | 1210 | 943 | 812 | 596 | 406 | 307 | 217 | 184 | 127 | 108 | 88.7 | 77.9 | 48.0 | 25.2 | 21.0 |
| 10.5V | 1590 | 1249 | 1176 | 920 | 800 | 585 | 405 | 306 | 211 | 184 | 126 | 108 | 88.7 | 77.9 | 48.0 | 25.2 | 21.0 |
| 10.8V | 1449 | 1215 | 1086 | 886 | 777 | 573 | 390 | 295 | 201 | 173 | 121 | 105 | 87.5 | 75.5 | 48.0 | 25.2 | 20.8 |

Ampere Table

(Ampere/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 10h | 20h | 24h |
|-----------|------|------|-------|-------|-------|-------|-------|------|------|------|------|-----|-----|-----|-----|-----|------|
| 9.6V | 166 | 133 | 112 | 84 | 72 | 53.4 | 34.9 | 26.5 | 20.4 | 15.8 | 11.1 | 9.2 | 7.5 | 6.6 | 4.0 | 2.1 | 1.75 |
| 9.9V | 153 | 126 | 110 | 84 | 71 | 51.9 | 34.7 | 26.3 | 19.8 | 15.7 | 10.9 | 9.1 | 7.4 | 6.6 | 4.0 | 2.1 | 1.75 |
| 10.2V | 145 | 119 | 108 | 82 | 70 | 50.9 | 34.6 | 26.1 | 18.4 | 15.5 | 10.7 | 9.0 | 7.4 | 6.5 | 4.0 | 2.1 | 1.75 |
| 10.5V | 143 | 112 | 105 | 80 | 69 | 50.0 | 34.5 | 26.0 | 17.9 | 15.5 | 10.6 | 9.0 | 7.4 | 6.5 | 4.0 | 2.1 | 1.75 |
| 10.8V | 130 | 109 | 97 | 77 | 67 | 49.0 | 33.2 | 25.0 | 17.0 | 14.6 | 10.2 | 8.8 | 7.3 | 6.3 | 4.0 | 2.1 | 1.73 |

*1 This battery is also available with a flame retardant battery case resin (UL94 V-0).

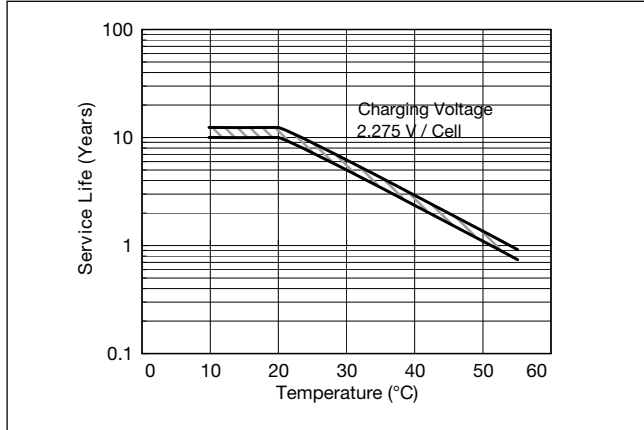
Charging Method

Trickle use Control voltage: 13.6 - 13.8V; Initial current: 6.3A or smaller

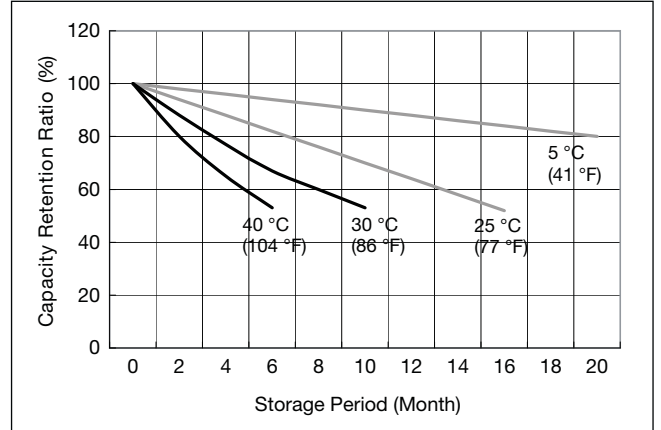
Cut off voltage

| | | | | | |
|---------------------|-------------|------------|-----------|-----------|------------|
| Discharge current | 2.1A - 8.4A | 8.4A - 21A | 21A - 42A | 42A - 84A | 84A - 126A |
| Cut off voltage (V) | 10.5 | 10.2 | 9.9 | 9.3 | 8.7 |

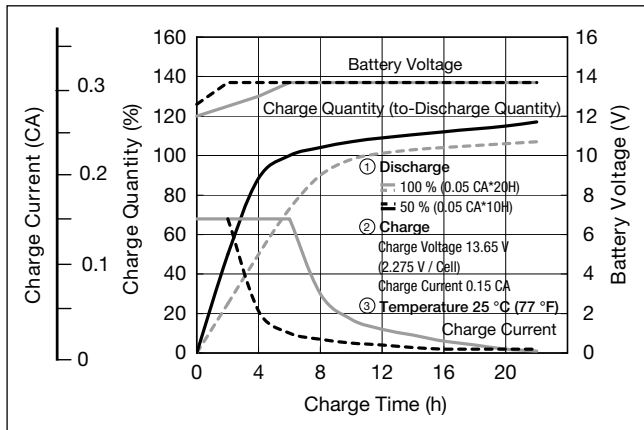
Influence of Temperature on Trickle life



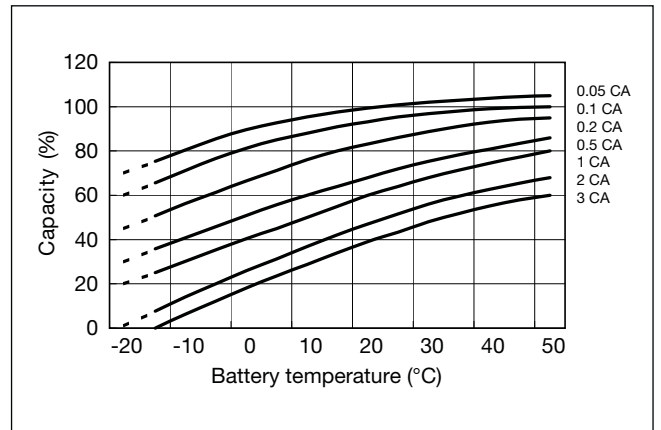
Residual capacity vs storage period



Constant-voltage and constant-current charge characteristics for Trickle use



Discharge capacity by temperature and by discharge current



Discharge characteristics

